11/144,546. For example, certain embodiments of a MEMS device, such as the device **100** shown in FIG. **8**A, may be fabricated by depositing a partially reflective and electrically conductive layer on a transparent or translucent substrate **120** to provide the optical layer **124**. A dielectric layer **128** is deposited over the optical layer **124**. Then, a sacrificial layer (not shown in FIG. **8**A) is deposited over the dielectric layer **128**. The sacrificial layer is selectively etched to form a plurality of holes exposing the dielectric layer **128**. The holes are filled with a dielectric material such as, for example, aluminum oxide, to form support posts **136***a* and **136***b*. Other suitable dielectric materials include polymers and other organic or inorganic compounds.

[0128] A conductive and reflective material such as, for example, aluminum, is deposited over the support posts **136***a*, **136***b* and the sacrificial layer to form a mechanical layer **132**. To form an electrically conductive portion of a third electrode **103**, the mechanical layer **132** is selectively etched in certain embodiments to form an opening over the support post **136***a*. A portion of the support post **136***a* is selectively etched to form a hole, which may extend to the dielectric layer **128** in some embodiments. The hole is filled with a conductive material such as, for example, aluminum, nickel, indium-tin-oxide, or molybdenum, to form the electrically conductive portion of the third electrode **103**.

[0129] Thereafter, an etchant is applied to the sacrificial layer, which reacts with and removes the sacrificial layer. As a result, the space filled with the sacrificial material becomes the interferometric cavity **144** and the MEMS device **100** of FIG. **8**A is formed. As is known in the MEMS device fabrication arts, additional or different processing steps and materials may be used to fabricate a MEMS device in accordance with the embodiments disclosed herein.

[0130] Although certain preferred embodiments and examples are discussed above, it is understood that the inventive subject matter extends beyond the specifically disclosed embodiments to other alternative embodiments and/or uses of the invention and obvious modifications and equivalents thereof. It is intended that the scope of the inventions disclosed herein should not be limited by the particular disclosed embodiments. Thus, for example, in any method or process disclosed herein, the acts or operations making up the method/process may be performed in any suitable sequence and are not necessarily limited to any particular disclosed sequence. Various aspects and advantages of the embodiments have been described where appropriate. It is to be understood that not necessarily all such aspects or advantages may be achieved in accordance with any particular embodiment. Thus, for example, it should be recognized that the various embodiments may be carried out in a manner that achieves or optimizes one advantage or group of advantages as taught herein without necessarily achieving other aspects or advantages as may be taught or suggested herein.

[0131] It is to be understood that persons of skill in the appropriate arts may modify the invention herein described while still achieving the favorable results of this invention. Accordingly, the foregoing description is to be understood as being a broad, teaching disclosure directed to persons of skill in the appropriate arts and not as limiting upon the invention.

What is claimed is:

1. A microelectromechanical system (MEMS) device comprising:

a first electrode;

a second electrode electrically insulated from the first electrode;

a third electrode electrically insulated from the first electrode and the second electrode;

a support structure which separates the first electrode from the second electrode;

a reflective element located and movable between a first position and a second position, the reflective element in contact with a portion of the device when in the first position and not in contact with the portion of the device when in the second position;

wherein an adhesive force is generated between the reflective element and the portion when the reflective element is in the first position, and wherein voltages applied to the first electrode, the second electrode, and the third electrode at least partially reduce or counteract the adhesive force.

2. The MEMS device of claim **1**, wherein the third electrode comprises a conductive portion of the reflective element.

3. The MEMS device of claim **1**, wherein the third electrode comprises a conductive portion of the support structure.

4. The MEMS device of claim **1**, wherein at least a portion of the third electrode is higher than the reflective element when the reflective element is in the first position.

5. The MEMS device of claim **4**, wherein at least a portion of the third electrode is directly above at least a portion of the reflective element when the reflective element is in the first position.

6. The MEMS device of claim **1**, wherein the third electrode is supported by the support structure.

7. The MEMS device of claim **1**, wherein the support structure comprises one or more posts and the third electrode comprises a conductive portion of at least one of the posts.

8. The MEMS device of claim **7**, wherein the support structure comprises a plurality of posts, each post having a conductive portion, and the third electrode comprises the conductive portions.

9. The MEMS device of claim **8**, wherein the plurality of posts are positioned substantially symmetrically relative to the reflective element.

10. The MEMS device of claim **1**, wherein the reflective element comprises a first layer and a second layer over the first layer.

11. The MEMS device of claim **10**, wherein the first layer is more flexible than the second layer.

12. The MEMS device of claim **10**, wherein the first layer is thinner than the second layer.

13. The MEMS device of claim **10**, wherein the second layer covers a central portion of the first layer and does not cover one or more edge portions of the first layer.

14. The MEMS device of claim **10**, wherein at least one of the first layer and the second layer is conductive.

15. The MEMS device of claim **1**, wherein the reflective element comprises end portions that are thinner than a center portion.

16. The MEMS device of claim **15**, wherein at least a portion of the reflective element is conductive.

17. The MEMS device of claim **1**, wherein the reflective element comprises one or more extensions above an upper surface of the reflective element and extending toward the second electrode.